# QMS® 1060 Print System Getting Started

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# 1

# Introduction

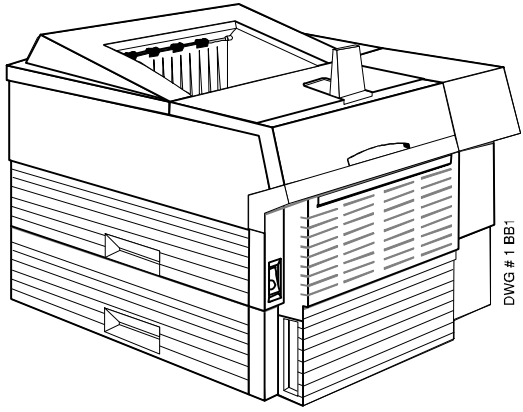
## In This Chapter . . .

- About the printer
- About the documentation
- About this manual
- Printer features and user benefits

# About the Printer

The QMS 1060 Print System offers the unique QMS Crown multitasking operating system, superior performance, extensive connectivity, upgrade options, and flexible emulation support.

In addition, it prints 10 pages per minute on letter/A4-size paper and offers a choice of 300x300 or 600x600 dpi printing on letter, legal, executive, A4, B5 ISO, or postcard-size paper. Its ability to handle envelopes, transparencies, and labels makes it a great printer for your day-to-day office needs.




# About the Documentation

The documentation provides a window into the many capabilities of your printer. The more familiar you are with the documentation, the easier it'll be for you to achieve the results you want from your printer.

Several pieces of standard documentation accompany your printer. If you've ordered any printer options, you'll have even more documentation. But don't worry—you don't have to read them all tonight to be able to use your printer. In fact, you may never need to use some of

them at all, depending on the type of documents you print and the environment in which you print them.

This section will give you an idea of how we've organized information and which documents you'll probably refer to the most.

## Standard Product Documentation

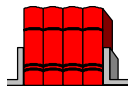
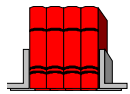
You received the following documentation with your product:

| | |
|---|---|
| ***QMS 1060 Print System Getting Started*** | You're looking at this manual right now. The section called "About This Manual" later in this chapter tells you what's included in this manual. |
| ***QMS 1060 Print System Operation*** | This manual guides you through the day-to-day operation of your printer. It includes information on replacing print media and toner, using advanced printing features, handling and cleaning your printer, improving print quality, and troubleshooting printer problems. |
| ***QMS 1060 Print System Reference*** | This manual provides information you may need only once in a while, such as information on typefaces and fonts, control panel configuration menu, memory, end job mode, PS protocol, HP-GL color encoding, and installing and using printer options. This manual also provides technical specifications, a list of printer-supported QMS Document Option Commands (DOC), character tables, and a glossary of frequently used terms. |

| | |
|---|---|
| ***QMS Crown Network Notes*** | Refer to this documentation for tips on using your QMS 1060 Print System if you're connecting to a network through the serial or parallel port. It discusses 3Com 3+Open, Banyan VINES, LAN Manager-based LANs, Novell NetWare, TCP/IP, UNIX, and VMS/ DECnet. In most cases, only advanced network users and system administrators need this information.<br>» **Note:** *This manual is provided on disk in encapsulated PostScript (EPS) form. Refer to the README file for information on printing a hardcopy of the manual.* |
| ***Printer Option Documentation*** | If you purchased a printer option (for example, a Kanji option kit), you received separate documentation for it. See chapter 6, "Printer Options," of the *QMS 1060 Print System Reference* for additional option information. |

## Other Relevant Documentation

Don't forget that your application, host operating system, and network documentation all contain useful information.:

| | |
|---|---|
|  ***QMS Crown Document Option Commands*** * **(This manual is available from your QMS vendor)** | Document Option Commands (DOCs) are software codes you insert in documents to enable printer features that cannot be accessed by your application or page description language. This manual lists and explains all of the commands. The DOCs supported by your printer are listed in appendix C, "Document Option Commands," of the *Reference* guide.<br><br>Using QMS DOC, you can develop one driver to support all languages and emulations for your printer. Also, you can use host network management software to create customized network printer queues for all users connected to the printer. In most cases, only advanced users and system administrators need this information. |
|  **PostScript Reference Manuals** | Other manuals that contain PostScript information are the *PostScript Language Reference Manual* (Adobe Systems, Inc., Reading, MA: Addison-Wesley, 1990 ISBN-0201-18127-4), and the "PostScript Language Reference Manual" (in *Supplement for Version 2011* Adobe Systems, Inc., January 24, 1992). |

# About This Manual

This manual contains detailed, illustrated instructions to guide you as you unpack and set up your printer and connect it to a host (such as an Apple Macintosh or an IBM or compatible PC). In addition, it introduces you to the printer's control panel. This manual is divided as follows:

| | |
|---|---|
| **1 Introduction** | Presents an overview of the documentation and of the printer's features. |
| **2 Setting Up Your Printer** | Guides you in selecting a location for your printer and explains how to unpack and set up your printer. |
| **3 Connecting to a Macintosh** | Explains how to connect the printer to an Apple Macintosh and then discusses Simultaneous Interface Operation (SIO) and Emulation Sensing Processor (ESP) technology. |
| **4 Connecting to a PC** | Explains how to connect the printer to an IBM PC or compatible computer using the parallel or serial interface. |
| **5 Using the Control Panel** | Introduces the parts of the printer control panel. |

| | |
|---|---|
| **A QMS Customer Support** | Provides product sales and support telephone numbers and describes how to communicate with QMS through the QMS Bulletin Board, CompuServe, the Internet, and Q-FAX. |
| **B Configuration Menu** | Provides a menu chart that shows a Configuration menu option's tree. |

## Typographic Conventions

The following typographic conventions are used in this manual:

| | |
|---|---|
| Mixed-Case Courier | Text you type, and messages and information displayed on the screen |
| *Mixed-Case Italic Courier* | Variable text you type; replace the italicized word(s) with information specific to your printer or computer |
| UPPERCASE COURIER | Information displayed in the printer message window |
| **lowercase bold** | PostScript operators and DOS commands |
| lowercase italic | Variable information in text |
| UPPERCASE | File and utility names |
| ↵ | Press the Enter key (PC) or Return key (Macintosh) |
| ^ | Press and hold down the Ctrl key (PC) |

» **Note:** *Notes contain tips, extra information, or important information that deserves emphasis or reiteration.*

▲ **Caution:** *Cautions present information that you need to know to avoid equipment damage, process failure, or extreme annoyance.*

**WARNING!** *Warnings indicate the possibility of personal injury if a specific procedure is not performed exactly as described in the manual.*

**ACHTUNG!** *Bitte halten Sie sich exakt an die im Handbuch beschriebene Vorgenhensweise, da sonst Verletzungsgefahr bestehen könnte.*

# Printer Features

This brief overview will acquaint you with your printer's major features and how they can benefit you. Specific chapters throughout the three volumes of the user's guide (this manual, the *Operation* manual, and the *Reference* manual) contain more information on each feature. Consult the index or the table of contents in each manual for guidance in locating this information.

## Media Flexibility

The printer supports print media in five different sizes (legal, letter, executive, A4, B5 ISO) in both portrait and landscape orientations. It also supports envelopes, postcards, and other custom print media.

**User Benefit**—You have the option of printing on a variety of standard and non-standard media sizes in both portrait and landscape orientations, as well as printing on envelopes, postcards, and other custom print media.

## Toner Savings

The printer provides toner savings with the Conserve Toner option.

**User Benefit**—A choice of printing modes allows you to lower printing costs by reducing the amount of toner on the printed page when printing draft copies of documents.

## Multiple Resolutions

Two printer resolutions are available: 300x300 and 600x600 dots per inch.

» **Note:** *With the standard 8 MB of RAM on the QMS 1060 printer 300x300 dpi is available for all media sizes and 600x600 dpi is available for all media sizes except legal which requires additional memory.*

**User Benefit**—A choice of print resolutions allows you to customize the quality of your output according to its use: 300x300 dpi for most hardcopy needs or 600x600 dpi for camera-ready output (depending on your application and requirements).

## Four Resident Emulations

Your printer supports printing in HP PCL 5, HP-GL, Lineprinter, and PostScript emulations.

**User Benefit**—Most applications can print directly to the printer.

### HP PCL 5 Emulation

The printer simultaneously emulates the Hewlett-Packard LaserJet IIISi and the HP PaintJet XL300 Color Printer (the output is gray-scaled on your QMS 1060 Print System). These printers are emulated at both 300x300 dpi (bitmap and scalable fonts) and 600x600 dpi (scalable fonts only).

» **Note:** *Using 600x600 dpi resolution with the legal media size requires additional memory. Only 300x300 dpi resolution is available for HP-GL/2.*

### HP-GL Emulation

The printer provides HP-GL plotter emulation (7470A, 7475A, 7550A, and ColorPro) at 300x300 dpi and 600x600 dpi.

» **Note:** *Using 600x600 dpi resolution with the legal media size requires additional memory.*

### Lineprinter Emulation

The Lineprinter emulation prints simple, unformatted text files at 300x300 and 600x600 dpi.

» **Note:** *Using 600x600 dpi resolution with the legal media size requires additional memory.*

### PostScript Level 2 Emulation and Level l Compatibility

The QMS 1060 Print System's Level 2 emulation allows you to take full advantage of your printer's high print resolution. The Level 2 emulation is compatible with Adobe's PostScript Level 2 language while providing additional capabilities. The Level 2 emulation supports extensive graphics capabilities to control the appearance of text, geometric shapes and images, and improves memory and resource management. Full support for PostScript Level 1 files is also included.

## Resident Fonts and Symbol Sets

Your printer comes with 12 PostScript typeface families containing 39 licensed fonts, and it provides support for any TrueType font that's in the format required for PostScript. All resident PostScript typeface families have multilingual character sets. The printer also has 7 resident bitmap PCL 5 fonts in 25 symbol sets each, 12 resident scalable PCL 5 fonts in 35 symbol sets each, 1 resident scalable PCL 5 font in 5 symbol sets, and 40 resident HP-GL symbol sets.

**User Benefit**—With so many resident fonts and symbol sets, there is less need for time-consuming downloading.

## QMS Crown Technology

The QMS Crown multitasking operating system provides fast processing speeds, networking capability, and higher printer performance while maintaining outstanding print quality.

## Multitasking and Compile-Ahead Technology

Your printer receives, compiles, processes, and prints multiple documents at the same time—true multitasking. The printer has a variety of resources that it uses to print the page. Memory, emulations, and the laser printer engine (the mechanical parts that actually put toner on the page) are all resources of the printer.

Compile-ahead technology is the temporary storage of page images in a proprietary compressed data format. It makes maximum use of the memory resource. While the engine is busy printing a page, compile-ahead technology uses the available printer memory to prepare the subsequent pages of the document (or the next job). These page images are available as soon as the current page is printed. For example, while the QMS 1060 Print System is actually printing the third page of a five-page document, pages four, five, and the next job in the queue are already compiled into the compressed data format.

**User Benefit**—With multitasking, your jobs are printed more quickly, and the host is free sooner. With compile-ahead technology you spend less time waiting for documents to print. This improves printer throughput and increases your productivity.

## Simultaneous Interface Operation (SIO)

Although many other printers have multiple interface ports and automatically designate a “hot port,” only one port actively receives data at a time. Your QMS 1060 Print System is unique because SIO allows all of its interface ports—LocalTalk, parallel (Centronics and bidirectional IEEE 1284), serial, and two optional network interfaces—to be active at the same time.

The standard interfaces let you connect to any Macintosh or IBM PC or compatible. The printer also works in many minicomputer, mainframe computer, and network environments.

**User Benefit**—You can have more than one computer sending print jobs to the printer. Each interface has an input buffer (which may be expanded with additional memory or an optional hard disk) that receives data while another interface is being used to print.

## Emulation Sensing Processor (ESP) Technology

Most printers can recognize only their native command language. However, ESP technology, which works with most popular commercially available applications, uses a form of artificial intelligence to analyze incoming file data and select the appropriate printer emulation from those installed on the printer, and processes the print job.

**User Benefit**—When your printer is in ESP mode, you can easily print PostScript, HP PCL 5, HP-GL, or Lineprinter documents without changing printer switch settings or sending software commands to accommodate different printer languages.

The QMS 1060 Print System prints almost any file sent in a language ESP technology understands, whether you have one, two, or more hosts, and whether you are communicating through an LocalTalk, Centronics or bidirectional IEEE 1284 parallel, serial, or optional network interface. Most users never have to change from ESP mode to another mode.

## Context Switching

After its initial use, the state of an emulation and downloaded data (such as fonts, macros, and overlays when changing emulations) is preserved for as long as the printer power is on.

**User Benefit**—Repetitive downloading of emulations, fonts, macros, and overlays is unnecessary.

## Compressed Data Formats

Crown printers convert data received from the input buffers into intermediate, compressed blocks until the data is needed for printing. These compressed blocks of data are designed to be processed rapidly by the printer, and many more can be stored in memory at one time than can traditional bitmapped images.

**User Benefit**—This allows and increases the speed of such printer features as collation and automatic jam recovery, if enabled.

### Automatic Jam Recovery

Crown technology also provides automatic jam recovery, if enabled. With most printers, if a media jam occurs, you must remove the jammed media and then reprint the job. If a media jam occurs on a Crown printer, however, the printer reprints the jammed page as soon as you remove the jammed media and then continues with the print job. This is possible because compressed data formats allow more pages to be stored in memory. The printer remembers the last page printed, pulls the necessary information from memory, and automatically reprints any lost pages.

**User Benefit**—You save time and print media because it's unnecessary to resend a print job after clearing a media jam.

## Energy Star Compliance

The QMS 1060 Print System is compliant with US Environmental Protection Agency (EPA) Energy Star regulations. After a specified length of inactivity, the printer changes to a low-power state (the engine remains on, but the fuser turns off). When a print job is received the printer returns to normal power within 90 seconds.

**User Benefit**—The EPA Energy Star Computers program promotes the use of energy-efficient personal computers, monitors, and printers and the reduction of air pollution caused by power generation.

## Software Loadable System (SLS)

Your printer has a software loadable system, which allows you to replace or upgrade its system software from a Macintosh, a PC, or over any network interface.

**User Benefit**—Future enhancements to the system software can be easily installed as they become available from QMS.

## Remote Console

The 1060 Print System printer allows you to establish a remote console connection via TCP/IP Telnet, and you can additionally use NetWare, EtherTalk, and LAN Manager/LAN Server to establish this connection, if you have the optional CrownNet interface installed. Printer status conditions that require user intervention display on the remote console. For example, status messages may indicate that paper is low, output bin is full, or a paper jam has occurred. (Refer to the *QMS CrownNet Interface System Administrator's Guide* for information on how to start the session, and refer to the *QMS Crown Remote Console User's Guide* for complete information on using a remote console to control and configure the printer.)

**User Benefit**—The ability to control your printer from a remote console as well as from the printer's own control panel means you don't have to leave your work station whenever the printer needs attention. Moreover, it means you'll know right away if the printer is tied up with a jam or other simple problem requiring user intervention.

## PCMCIA Card Slot

A PCMCIA (Personal Computer Memory Card International Association) card slot is available to support Release 1 and 2, Type I, II and III cards.

**User Benefit**—This card slot allows you to use optional fonts or emulations (see "Printer Options," in the following section).

## Printer Options

The following options are available for your QMS 1060 Print System. Contact your QMS vendor for purchase information.

### Upgradable RAM (Random Access Memory)

The 8 megabytes (MB) of resident RAM (Random Access Memory) is upgradable to 64 MB through the installation of Single In-line Memory Modules (SIMMs).

**User Benefit**—Your printer's memory can be upgraded as your needs grow. Additional RAM provides room for font downloading and font caching, and it increases the printer's buffer (the area where data sent from the host computer is stored), allowing you to send large data-intensive files to the printer without tying up the host for long periods. Additional RAM also allows you to attach and use multiple SCSI drives.

## 500-Sheet Cassette, Optional Cassette, Optional Cassette and Feeder, and 50-Envelope Cassette

These options increase the printer's media feed capacity and flexibility. Your printer comes standard with a multipurpose tray to handle 150 sheets of 20-pound (75 $g/m^2$) paper in letter, A4, legal, executive, or B5 ISO sizes, or 10 envelopes. The 500-sheet cassette is capable of supporting letter or A4 paper. The optional cassette and feeder supports another 500 sheets of paper in letter, A4, or legal sizes, for a total input of 1150 sheets, including the multipurpose tray. The optional 50-envelope cassette allows you to feed 50 envelopes instead of the 10 allowed in the multipurpose tray.

**User Benefit**—You can customize the printer's media input sources to your printing needs and double the amount of paper available before refilling cassettes. The envelope cassette increases 5-times the number of envelopes that can be handled by the multipurpose tray.

## Optional Fonts

Optional fonts are available in several different formats.

- The PCL ProCollection and special PostScript fonts are either contained on PCMCIA cards or must be downloaded to an optional printer hard disk. Optional font cards are plugged into the slot on the back of the printer.

- Kanji fonts Ryumin Light-KL and Gothic BBB Medium licensed to QMS by Morisawa and Company, Ltd. and the fonts Mincho Medium, Mincho Heavy, Gothic Bold, and Gothic Heavy licensed to QMS by TypeBank are on a pre-formatted IDE hard disk. These fonts are available with the Kanji Option Kit and they can be printed at a variety of point sizes and in different styles and resolutions.
- The Intellifont SIMM increases the number of PCL 5 fonts from 20 to 37 for compatibility with the LaserJet 4Si.

**User Benefit**—Optional fonts increase the printer's functionality. Extra fonts allow you to create more distinctive documents.

## Optional Emulations

Optional emulations, such as LN03 Plus and QUIC II are contained on diskettes and must be downloaded to an optional printer hard disk. Contact your QMS vendor for a complete list of available emulations.

**User Benefit**—Extra emulations allow you to print documents created in printer languages other than those resident on the printer.

## Security Card

An optional security card allows you to password-protect the printer's configuration menu. Optional security cards are plugged into the PCMCIA card slot on the back of the printer.

**User Benefit**—A security card restricts access to the configuration menu to those users with valid passwords, ensuring that default settings are not changed inappropriately.

### Optional I/O Slot

Your 1060 Print System has dual I/O slots to support two network interfaces, or one hard disk and one network interface.

- Network Interfaces

  Using CrownNet NICs (network interface cards), the QMS 1060 Print System can be attached to Ethernet or Token-Ring networks running multiple protocols. Contact your QMS vendor for a list of available protocols.

  **User Benefit**—Network interfaces provide flexibility and fast data transfer in complex network environments.

- Hard Disk Expandability

  One of the two optional interface slots can support one IDE-SCSI board with a 2.5" internal IDE hard disk and up to three external SCSI hard disks. Either slot can be used for the IDE drive, but only one IDE drive can be supported at a time. See appendix E, "Technical Specifications" in *Reference* for hard disk specification information.

  **User Benefit**—Hard disks provide virtual memory type capabilities as well as storage for downloaded character bitmaps, outline fonts, forms, and other files.

# What's Next?

Chapter 2, "Setting Up Your Printer," explains how to find a good location for the printer, unpack the printer, install a toner cartridge, and load and install a 500-sheet paper cassette.

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# 2

# Setting Up Your Printer

## In This Chapter...

- Finding a good location for the printer
- Unpacking the printer
- Installing a toner cartridge
- Loading and installing a 500-sheet cassette
- Connecting the power cord
- Printing a start-up page

# Introduction

This chapter explains how to set up your QMS 1060 Print System for the first time.

It includes information on finding a good location for the printer, unpacking and checking the shipment contents, installing a toner cartridge and media cassette, and printing a start-up page.

# Finding a Good Location

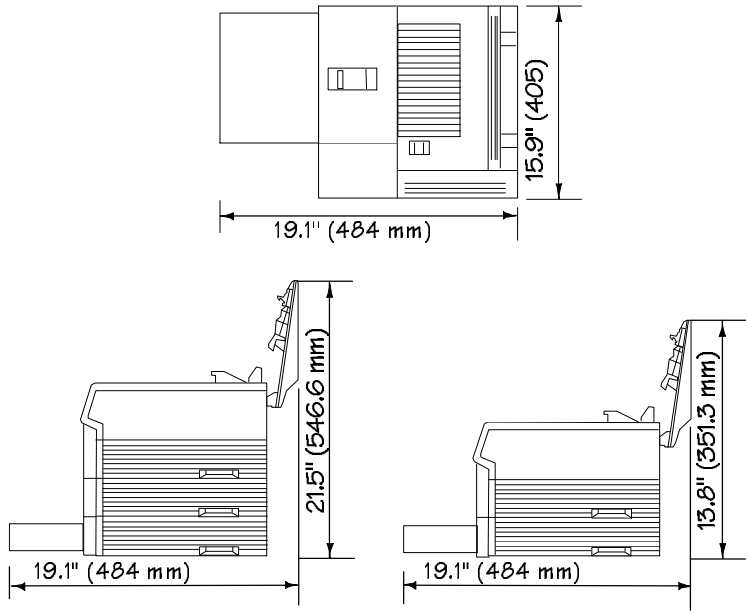
Your QMS 1060 Print System operates in any computing environment with the following requirements.

## Location Requirements

- Away from cooling sources, heating sources, extreme temperature changes, direct sunlight, excessive dust, and corrosive chemicals or vapors.
- Away from any strong electromagnetic field (such as that created by an air conditioner) and excessive vibration.
- Temperature range of 50° F (10° C) to 95° F (35°C).
- Relative humidity range of 15% to 85%.
- Level and capable of supporting the printer weight, which is about 38 lbs (17.25 kg) for the printer only (without the cartridge and media).
- An appropriate distance from the host computer, based on your operating environment—6 feet (1.8 meters) or less for a parallel connection or 25 feet (7.5 meters) or less for a serial connection.
- Close to an easily accessible power supply.
- Well ventilated room.

- Enough space to

  —Allow adequate ventilation
  —Hold the printer and its standard cassette and feeder
  —Open the printer's top cover
  —Access the multipurpose tray
  —Open the media cassettes
  —Hold the printer and an optional cassette and feeder (if installed))



## Power Requirements

Your printer requires a properly grounded AC outlet with a power range of ±10% of the rated line voltage (120 V or 220/240 V). Noise-generating equipment should not be connected to the same electrical outlet as the printer. The recommended frequency is 47-63 Hz for 120 V system and 47-50 Hz for 220/240 V system.

▲ **Caution:** *The supplied power cord is equipped with a 3-wire grounding plug for safety purposes. Connect the plug to the proper grounding-type power outlet.*

### Energy Star Compliance

The printer is compliant with US Environmental Protection Agency (EPA) Energy Star regulations. After a specified period of inactivity, the printer changes to a low-power state (the engine remains on, but the fuser turns off). When a print job is received, the printer returns to normal power within 90 seconds.

# Checking Shipment Contents

In addition to this manual, your shipment consists of the following items:

- QMS 1060 Print System (with multipurpose tray)
- Paper feeder and standard 500-sheet letter/A4 cassette boxed separately but banded to the printer unit's box)
- Paper stopper
- Documentation

  —*QMS 1060 Print System Operation*

  —*QMS 1060 Print System Reference*

  —*QMS Crown Network Notes* (on disk)

- Software

  —PS Executive Series Utilities software (on disk)
- Documentation binder
- Toner cartridge
- Power cord
- Warranty and registration card

» **Note:** *Interface cables aren't included in the shipment. If you need cables, contact your QMS vendor or a local computer store. Chapters 3, "Connecting to a Macintosh," and 4, "Connecting to a PC," of this manual specify the type of cable you need.*

Make sure that all items are included in your shipment before setting up your printer. If any items are missing or damaged, contact your shipping company or your QMS vendor. See appendix A, "QMS Customer Support," for product sales and support information.

# Registering the Printer

QMS is committed to developing print systems that offer you flexible, efficient solutions, so we're interested in knowing how you plan to use your printer.

To register by mail, fill out and send in your warranty card. To register by telephone, in the US call QMS toll-free at (800) 637-8049. In other countries, refer to appendix A, "QMS Customer Support," for the appropriate telephone number.

# Unpacking the Printer

The packing materials that protect your printer during shipment—cardboard, polystyrene, tape, and shipping spacers—must be removed before you can use the printer.

Use the following procedure to unpack the printer. To ensure that your printer was not damaged during shipment, follow the entire procedure, including printing the start-up page.

» **Note:** *You may want to save the packing materials in case you ever have to move or ship the printer to a new location.*

▲ **Caution***: You may damage the printer if you turn it on before all of the packing materials are removed.*

**WARNING!** *The printer weighs about 38 lbs (17.25 kg). Don't lift it by yourself.*

**ACHTUNG!** *Der Drucker wiegt ca 17.25 kg; bitte versuchen Sie niemals, das Gerät alleine anzuheben oder zu tragen.*

**1 Remove everything except the printer from the shipping carton.**

**2 Lift the printer out of the shipping carton.**

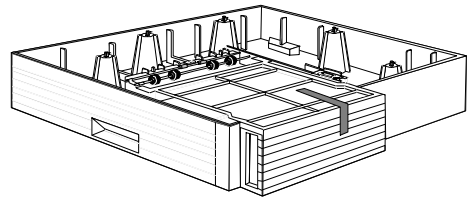
Hold the printer by the carrying grips located on the printer bottom.

**WARNING!** *The printer is heavy, so two people should lift it.*

**ACHTUNG!** *Der Drucker ist schwer und solte von 2 Personen getragen werden.*

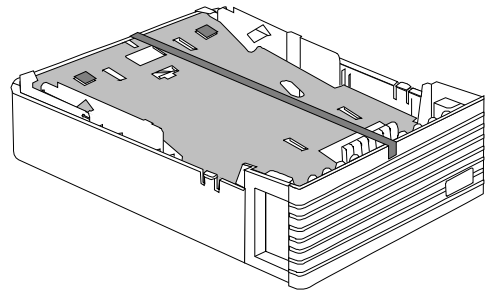
**3 Remove the protective plastic covering and tape from the printer body.**

4 **Remove the packing materials and tape from inside the standard feeder and place it in the location where the printer is to reside.**

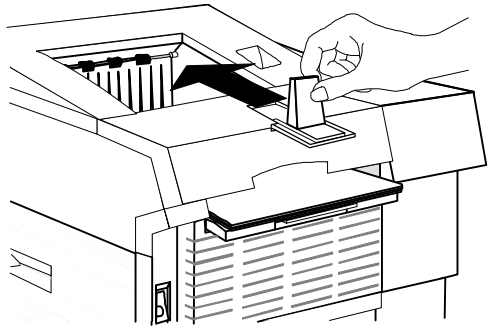


5 **Slide the cassette out of feeder.**

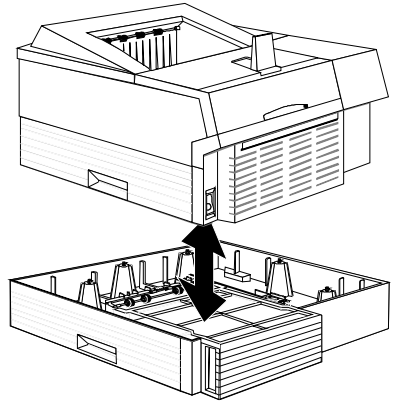
6 **Remove the packing materials and tape from inside the cassette and slide it in the feeder as far as possible.**



**7 Slide the paper stopper on the tray cover.**



**8 Stack the printer on top of the feeder.**



**WARNING!** *The printer is heavy, so two people should lift it.*

**ACHTUNG!** *Der Drucker ist schwer und solte von 2 Personen getragen werden.*

# Installing Consumables

You must install the toner cartridge, load and install the cassette, connect the power cord, and print the start-up page before you can install any options.

## Installing the Toner Cartridge

In your laser printer, characters and images are created through a process that applies toner (made of carbon particles) to the page in the printer's fusing unit. When an image is formed, heat and pressure are applied to transfer the image to the page. The toner cartridge contains the toner and photosensitive drum needed to operate the laser printer. You may purchase additional toner cartridges from your QMS vendor.

» **Note:** *The toner cartridge is sensitive to bright light. Do not remove the cartridge from its protective bag until you are ready to install it. Store the cartridge in an environment that is not subject to extreme heat or humidity. Keep the toner cartridge away from your computer. The magnets in the cartridge can damage data, particularly on your floppy disks.*

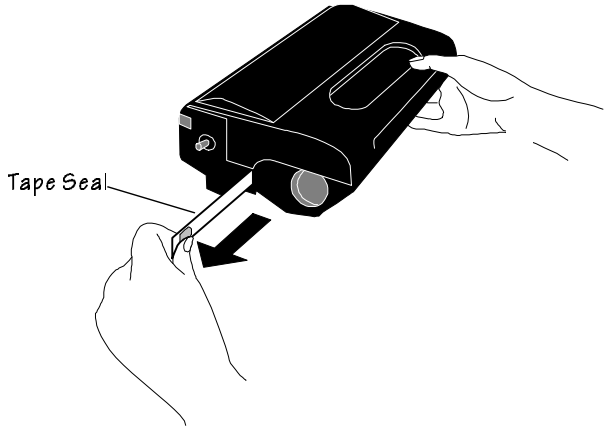
**1 Lift the toner cartridge out of its shipping carton, open the aluminum protective bag, and remove the cartridge.**

» **Note:** *After taking the toner cartridge from its protective bag, do not open the cover or touch the PC drum of the toner cartridge because it may deteriorate the drum and reduce print quality.*

**2 Remove the tape seal.**

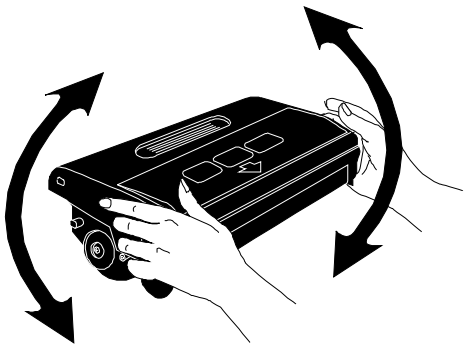
Holding the cartridge in place with your right hand, use your left hand to grasp the green tab on the left side of the toner cartridge. Pull the tab straight out (it is about 22"/559 mm long). If the tab

breaks, grasp the clear part of the tape seal and pull it straight out. Discard both the green tab and the tape seal.

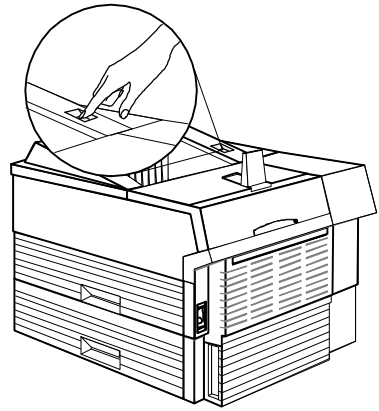



**3 Distribute the toner in the cartridge.**

Holding the cartridge with both hands, gently rock it from side-to-side five or six times to distribute the toner.

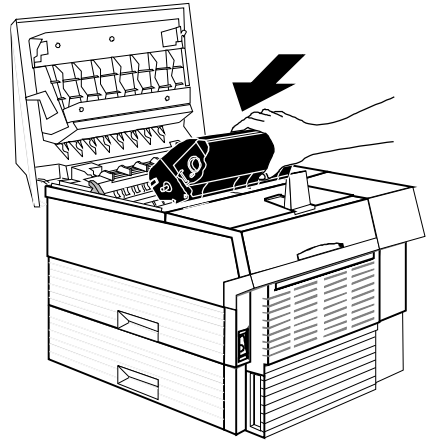


**4 Open the printer's top cover.**



**5 Slide the toner cartridge into the printer.**

Hold the grooved area on the toner cartridge with your right hand, with the arrow on the toner cartridge facing away from you angle the cartridge down in the printer. Place the cartridge on the rails inside the upper unit of the printer, and gently slide it straight down until it is firmly seated.



**6 Close the printer's top cover.**

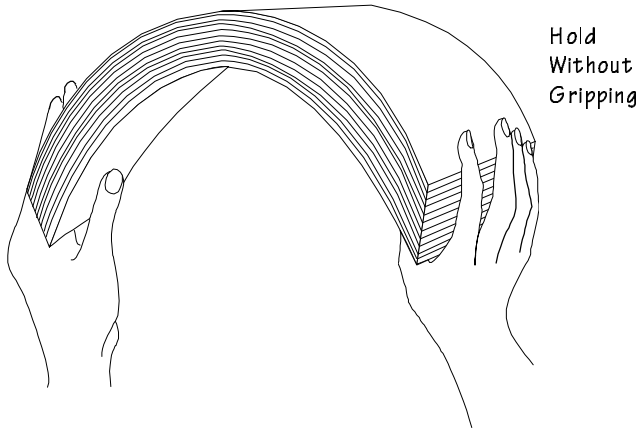
## Loading the 500-Sheet Cassette

The QMS 1060 Print System comes standard with one 500-sheet letter/A4 cassette. The printer automatically pulls media from the cassette. Load media in the cassette as follows:

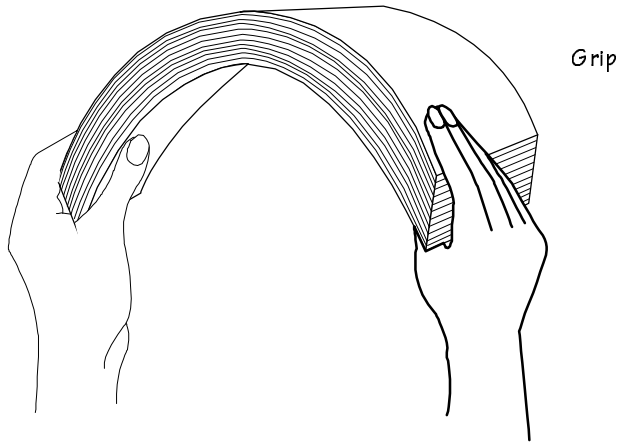
» **Note:** *You should ensure that the media size matches the cassette size; otherwise, the printed image will not be correctly placed on the page.*

**1 Unwrap the paper, pull the stack out, and then with one hand at each end of the stack, lift and hold it in a curved position as shown in the following illustration.**

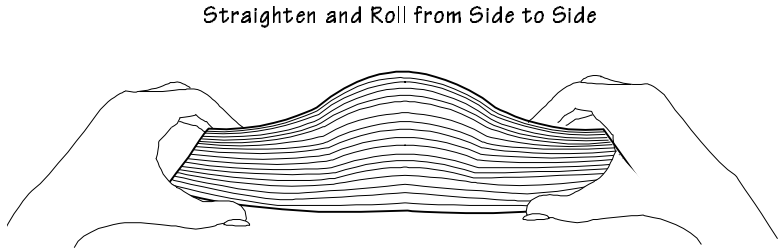
» **Note:** *Paper is packed in reams of 500 sheets. Do not unpack the paper above the printer as this might cause particles to fall into the printer components. Note the arrows on the wrapper. They show which side of the paper should be on top when it is loaded in the cassette.*



**2 Grip each end of the stack firmly.**

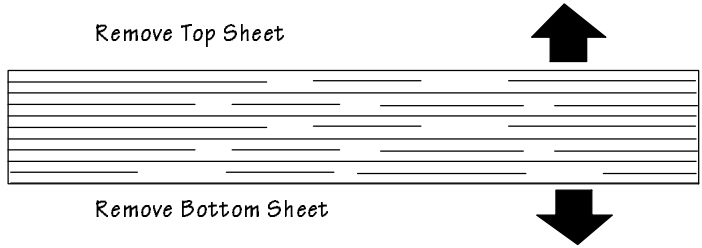



**3 Straighten the stack, and then roll the fanned sheets from side to side to get air through the sheets and prevent static buildup.**



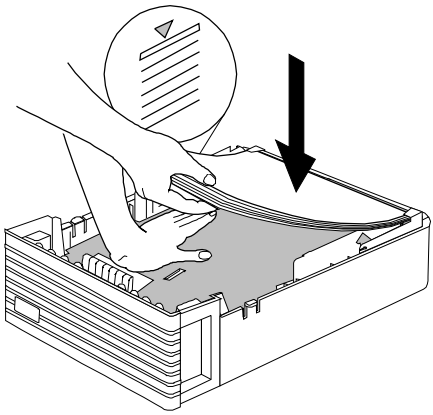

**4 Take off the top and bottom sheets**

The top and bottom sheets sometimes have residual glue buildup that could cause the printer to jam.




**5 Position the cassette.**

The cassette has a spring in the bottom that provides some resistance when print media is placed on it. Lay the cassette flat on a hard surface and using your left hand push down on the plate in the cassette until it locks.



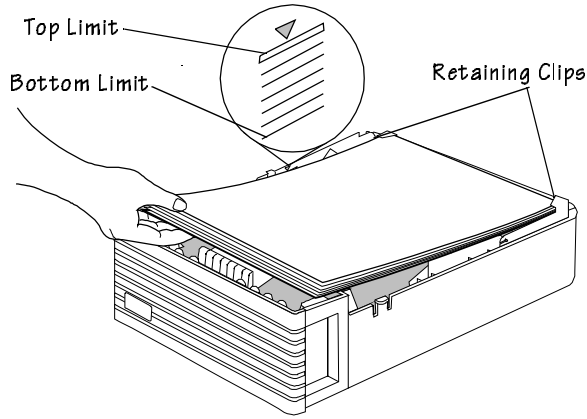
**6 Load media in the 500-sheet cassette in increments so that the 500 sheets fit in the cassette and the media stack is properly leveled out.**

Load the media so the front end of the stack comes against the front of the cassette in three steps as follows:

a Up to the bottom limit mark

b Halfway to the top limit mark

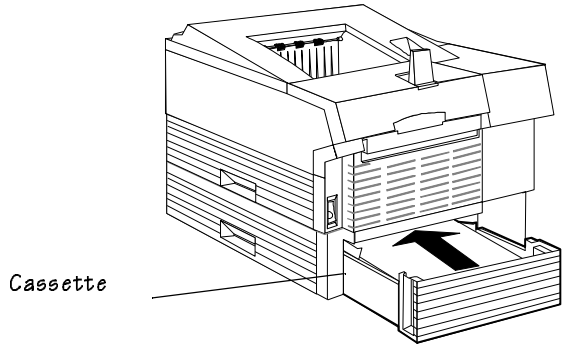
c Up to the top limit mark.




**7 Ensure that the media stack lies flat, does not exceed the top limit mark, and is positioned under the retaining clips.**

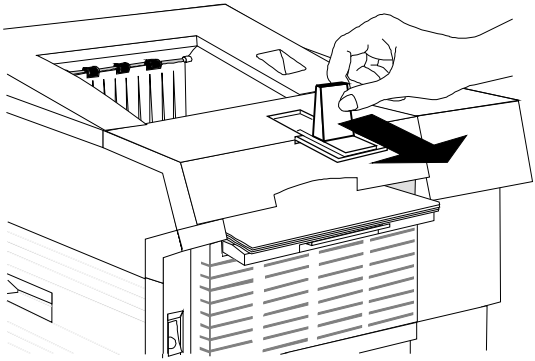
**8 Slide the cassette into the feeder.**

Push the cassette straight into the cassette slot on the feeder until it's firmly seated.




**9 Adjust the media stop to fit the media size.**

The printer delivers your output, print-side down, to the output tray on the top of the printer. The media stop keeps the sheets positioned in the output tray.

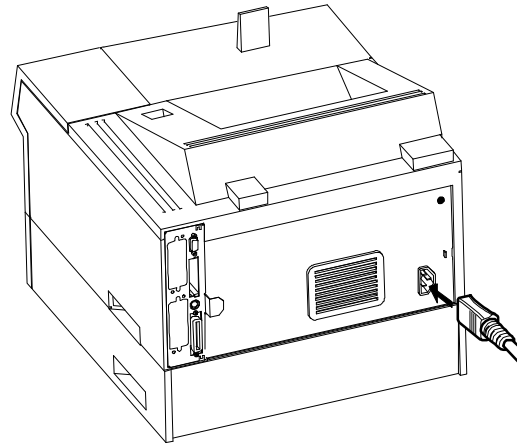


# Connecting the Power Cord

Connect the power cord as follows:

▲ **Caution***: Make sure that the printer power switch is turned off (the O is pressed down).*

**1 Plug the female end of the power cord in the connector on the rear lower right of the printer.**



**2 Plug the opposite end of the power cord in a grounded AC outlet.**

**3 Turn on the printer (press down the | side of the switch).**

After a brief warm-up (less than 2 minutes) the printer produces a start-up page.

# Printing a Start-up Page

When you turn on the printer, a start-up page prints. This page gives you an overview of your QMS 1060 Print System.

The following information prints on the start-up page:

- Printer product name
- Cumulative number of printed sheets
- Amount of resident RAM (in megabytes)
- Number of PostScript typefaces in ROM
- Default resolution
- Software version, revision, and release numbers
- Firmware level number
- Hard disks or cartridge attached, if any
- Emulation and protocol information of all standard and optional interfaces

» **Note:** *When an Intellifont ROM is installed the following appears in the Options section of the start-up page even though you have only one installed:*

```
%cartridge1%
%cartridge%
```

If the start-up page prints with all the start-up page information, and the print quality is good, go to chapter 3, “Connecting to a Macintosh,” or chapter 4, “Connecting to a PC” of this manual, depending on your computer platform.

If you purchased any printer options, you can install them now. If installation instructions are included with your option, follow them. If not, installation instructions are included in chapter 6, “Printer Options,” of the *Reference* guide.

If a start-up page does not print, see chapter 6, “Troubleshooting,” of the *Operation* guide for more information on printing a start-up page.

**WARNING!** *Turn the printer off and unplug the power cord before checking for correct printer installation.*

**ACHTUNG!** *Schalten Sie bitte den Drucker aus und ziehen Sie auch den Netzstecker heraus, bevor Sie die korrekte Installation des Druckers überprüfen.*

## Enabling/Disabling the Start-up Page

A start-up page automatically prints when you turn on your print system. However, you can save time, paper, and toner by disabling the start-up page.

If you need the information included on the start-up page after you have disabled the page (for example, to provide to the QMS Customer Technical Assurance staff when you need technical support.

The two easiest ways to disable (and enable) the start-up page are

1 **Use the PS Executive Series Utilities.**

(See the PS Executive Series Utilities on-line help for complete information.)

2 **Use the printer control panel (Administration/Startup Options/Do Start Page menu).**

See “Enabling/Disabling the Start-up Page” in chapter 4, “Printer Configuration,” of the *Reference* guide for complete information.

# Installing Options

If you purchased any printer options, such as extra memory (SIMMs), emulations, a SCSI-IDE board, a network interface card, or an internal hard disk drive, install them now. If installation instructions are included with the option, follow them. If not, installation instructions are included in chapter 6, “Printer Options,” of the *Reference* guide.

# What’s Next?

Now that you’ve set up your printer, go to chapter 3, “Connecting to a Macintosh,” or chapter 4, “Connecting to a PC,” of this manual to connect your printer to a host computer.

❖

# 3

# Connecting to a Macintosh

## In This Chapter . . .

- Printer-host interface
- Connecting via the LocalTalk Port

# Introduction

This chapter explains what an interface is, describes how to connect your printer to a Macintosh (or another computer on a network that uses LocalTalk-type connectors and boxes).

## Using an Optional Network Interfaces

In addition to the three standard interfaces—LocalTalk, parallel (bidirectional), and serial—the QMS 1060 Print System has the option of using two optional interfaces to connect your printer to an Ethernet or Token-Ring network.

If you have purchased an optional interface for your printer, refer to the following for more information:

- If you've purchased an optional network interface for the printer, see chapter 6, "Printer Options," of the *Reference* guide as well as the documentation that comes with the interface for installation instructions.
- The documentation that comes with the optional network interface contains information about all other options in the network interface menu as well as instructions for connecting the printer to the network and for printing over the network.
- Your application and network documentation contain information on printing over the network.

# Using the LocalTalk Interface

Connecting to the LocalTalk port involves basically three steps: assembling the proper interface cabling (use a LocalTalk-type kit such as Farallon's PhoneNET, available from your QMS vendor), making the connection, and making sure the necessary printing files are installed on the Macintosh.

The LocalTalk port is used to print if

- Your host is any member of the Apple Macintosh family. The instructions in this chapter explain how to connect a Macintosh (via either a direct connection or through a LocalTalk network connection) to the QMS 1060 Print System.
- Your host is an IBM PC or compatible microcomputer, workstation, minicomputer, or mainframe computer that connects through a print network (such as AppleShare) using LocalTalk-type connectors and boxes.

  If you're connecting to a host such as these, you may need additional hardware or software. See your host or network documentation for details specific to your setup.

## Interface

Interface is the point at which two elements connect so they can work together. Printer-host interface is the way a printer connects to and works with a host (for example, a microcomputer, minicomputer, mainframe computer, or a network), and it involves both hardware and software. The way your printer interfaces with a host depends on many things, including computer type, computer ports available, interface cabling, application software, printer emulations, and printer drivers.

## Macintosh Interface Cabling

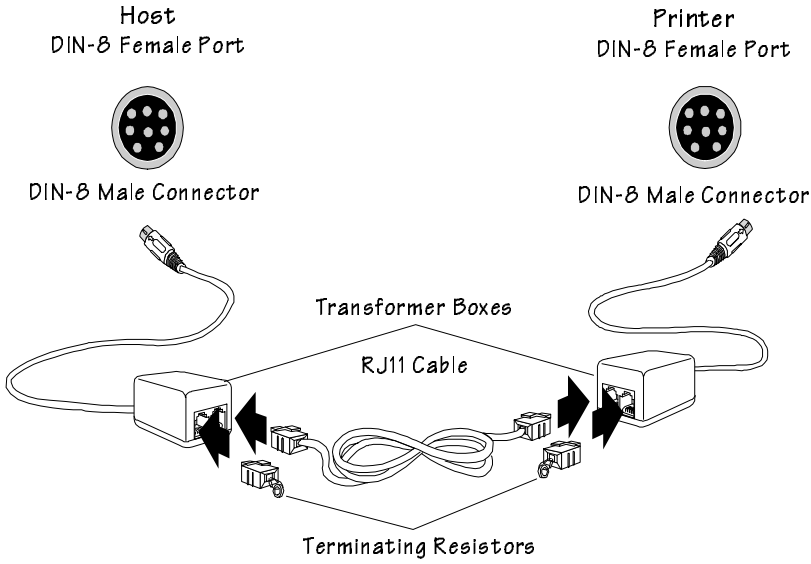
To connect your printer to a single Macintosh, you must have

» **Note:** *For cable pinout information, see appendix B, of the Reference guide, the "Cable Pinouts" section,.*

- Two PhoneNET-type transformer boxes: one with a DIN-8 connector for the printer port and one with a DIN-8 connector for the Macintosh port
- An RJ11 (telephone) cable
- Two terminating resistors to close the open sockets left in the transformer boxes after the connection is made

If you're replacing a printer already connected to a Macintosh, you probably already have this equipment.

If you're connecting the printer to an AppleTalk network with more than one Macintosh, see your PhoneNET and Macintosh documentation for more information.



## Making the Connection

Use the following procedure to connect your printer to the Macintosh.

▲ **Caution***: Turn off both the printer and the Macintosh before making the connection.*

1. **Plug the connector from one transformer box into the printer's LocalTalk port.**
2. **Plug the connector from the other transformer box into the Macintosh printer port.**
3. **Connect the two transformer boxes with the telephone cable.**
4. **Put terminating resistors in all open sockets in the connector boxes.**

   This ensures proper communication and helps speed up transmission.
5. **Turn on the printer.**

   A start-up page should print if it has not been disabled.

## Macintosh Printing Software

If your Macintosh was previously connected to a PostScript printer, you can probably start printing now with the printing software already in place. Refer to your application documentation for instructions on sending a document to the printer.

**However**, if you want to use all of your printer's special features (like collation, 600x600 dpi printing, and gamma correction), **or** if you've never printed to a PostScript printer before, you need to take a few minutes to make sure you have the following printing software installed:

- PS Executive Series Utilities
- The 1060 PPD file
- Application-specific printer files

## Installing PS Executive Series Printer Utilities

The PS Executive Series Utilities (or PS Exec), included on the Macintosh-format disks we shipped with your printer, is a utilities program for controlling the printer from the Macintosh. For example, through PS Exec you can turn off the start-up page, rename the printer, install printer-resident screen fonts, download fonts, print font samples, and manage hard disks. Many of the procedures described in this manual involve using PS Exec.

1 **With the Macintosh on, insert the Macintosh Format PS Executive Series Utilities disk in the disk drive.**

2 **Double-click the PSExec3.*xx* Installer icon.**

3 **In the PSExec 3.*x* dialog box that appears, verify the Install Location.**

To change the Install Location you can either use the drop-down list box to display and select the appropriate disk, or you can choose the Switch Disk button to scroll through the available disks.

4 **Also in the PSEXEC 3.*x* dialog box, choose Easy Install or Custom install.**

- **Easy Install** automatically installs all of the utilities, including the PS Exec application; the LaserWriter 8.*x* driver; the PDF, PDX, and PPD files; and the screen fonts.
- **Custom Install** allows you to choose the options you want to install.

  The amount of available space on your Macintosh hard disk and the amount of space necessary for all of the selected options are indicated near the bottom of the window.

» **Note:** *If you're using Custom Install, you can click the small icon (it looks like an* `I` *inside a square) to the right of each option for more information about that install option.*

5 **Click Install to begin the installation.**

The installation takes approximately one minute. The Installer places the LaserWriter 8.*x* driver in the Extensions folder inside the System Folder and all of the other options inside a newly created PSExec 3.*xf* folder in the hard disk window. Also inside this folder is the Installer log file, which you can view to verify the installation.

» **Note:** *All Macintosh users on a network must use the same version of the LaserWriter and Laser Prep files to run correctly. For example, if the network has a mixture of LaserWriter 6.x, 7.x, and/or 8.x, the printer will experience frequent reinitialization problems. To check the version number, select the LaserWriter icon and then hold down the Command key and press the I key. The driver version number appears in the Info window on the second to last line. LaserWriter 7.x and 8.x do not require a Laser Prep file to work correctly with your printer. The Laser Prep information is located within the LaserWriter driver itself.*

**6 When the installation is finished, you are prompted to choose Continue to install additional options from the Custom installation option or to choose Quit to exit the Installer program.**

» **Note:** *The Easy Install procedure automatically installs the Version 4.*x *PPDs but not the Version 3.0 PPDs. If you want to install them, you can do so now as a Custom installation. Return to step 4.*

**7 Back at the hard disk window, open the new PSExec 3.*x f* folder and then, inside that, the PS Exec *f* folder.**

**8 Open PSInstall to personalize your copy of PS Exec.**

**9 Check the README file(s) for updates, and see the PS Exec on-line help for information on using the utility.**

## Installing the QMS 1060 4.1 PPD

The QMS 1060 Print System 4.1 PPD (a printer description file) allows you to take advantage of printer-features like multiple-resolution printing and collation that are not available through LaserWriter 8.*x* alone.

» **Note:** *If you have problems printing with LaserWriter 8.x, reinstall the LaserWriter 7.x driver that came with your Macintosh (if available), or call the QMS Customer Response Center (CRC). See appendix A, "QMS Customer Support," for a list of telephone numbers.*

1 **If you haven't already, follow the instructions given above in "Installing PS Executive Series Printer Utilities."**

2 **If necessary, create a Printer Descriptions folder:**

**System 7 users**—Create a folder called Printer Descriptions inside the Extensions folder inside the System Folder.

**System 6 users**—Create a folder called Printer Descriptions inside the System Folder.

3 **Open the 4.1 PPDs folder inside the PSExec 3.*xx f* Folder.**

4 **Select the QMS 1060 Print System PDF, and drag it to the Printer Descriptions folder.**

5 **From the Apple menu, choose Chooser.**

6 **In the Chooser window, select the LaserWriter 8.*x* icon and select QMS 1060.**

7 **Choose the Setup button.**

This causes the LaserWriter to query the printer and automatically choose the appropriate PPD.

8 **Exit from the Chooser.**

Now, when you open your application, you can access QMS printing options by choosing Options in your application's Print dialog box. Choose Help in the Options dialog box for information on these options.

## Installing Application-Specific Printer Files

If you plan to print from Aldus PageMaker, Aldus FreeHand, Aldus PrePrint, Adobe Separator, or QuarkXPress, you'll also want to install the latest printer description file (PPD, PDX, or PDF) for your particular software. You can probably print without this file, but you may not be able to access all of your printer's features, and you may get an error message telling you to change the printer name.

» **Note:** *The application (PageMaker, FreeHand, PrePrint, Separator, or QuarkXPress) should be installed before you install the printer description file(s).*

1 **If you haven't already, follow the instructions given above in "Installing PS Executive Series Printer Utilities."**

2 **Install the appropriate printer description file(s) for your application from 4.1 PPDs, PDFs, or PDXs folder in the PSExec 3.*xf* folder:**

- **If you use Adobe Separator,** install the PPD file. Your Separator documentation explains where to put it.
- **If you use QuarkXPress,** install the PDF in the same folder as QuarkXPress. Check your QuarkXPress documentation for details.
- **If you use Adobe PageMaker 5.*x*,** install the version 4.1 PPD in the Printer Descriptions folder.
- **If you use Aldus PageMaker 4.*x*,** install the version 3.0 PPD and PDX files in the PPDs folder in the Aldus folder in the System Folder.
- **If you use Aldus FreeHand 4.*x*,** install the version 4.1 PPD in the Printer Descriptions folder.

- **If you use Aldus FreeHand 3.*x*,** install the version 3.0 PPD and PDX files in the PPDs folder in the Aldus folder in the System Folder.

» **Note:** *Version 3 PPDs are not installed automatically through the PS Exec Easy Install procedure. You must use the Custom Install procedure. Refer to the PS Exec installation instructions at the very beginning of this section.*

- **If you use Aldus PrePrint,** install the version 3.0 PPD and PDX files in the PPDs folder in the Aldus folder in the System Folder.

» **Note:** *Version 3 PPDs are not installed automatically through the PS Exec Easy Install procedure. You must use the Custom Install procedure. Refer to the PS Exec installation instructions at the very beginning of this section.*

- **If you use QuarkXPress**, install the QMS 1060 and 1060E PDFs in the same folder as QuarkXPress. While QuarkXPress 3.3 allows you to access either PDFs or PPDs, to have access to all of your printer's features, you should use the PDF. To select the PDFs, go to the Page Setup dialog box in QuarkXPress, and hold down the Shift key while clicking the Printer Type list box. (The italicized selections are PPDs, and the non-italicized selections are PDFs.) See your QuarkXPress documentation for more information.

» **Note:** *The 1060E PDF allows you to choose between Basic and Enhanced (Advanced) Halftoning in QuarkXPress. If this PDF is not present, you won't be able to used Enhanced Halftoning even though the printer supports it. See chapter 5, "Additional Technical Information," in the Reference for more information on halftones.*

## Testing Macintosh Communication

You can check communication between the printer selected in the Chooser and the Macintosh by sending a file to the printer from an application (see your application documentation for more information) or by printing a directory, as described here:

**1 Display a disk or folder window.**

**2 Set up page information.**

Choose Page Setup from the File menu. Select paper size, printing orientation, and any other necessary options. Then select OK.

**3 Print a directory or a window.**

a Choose Print Directory or Print Window from the File menu. A dialog box appears.

b Select the printing options you want; then click OK. If no page prints, check chapter 6, “Troubleshooting,” of the *Operation* guide.

## Printing from the Macintosh

You're now ready to print from your Macintosh. From this point, you'll probably perform most printing tasks from your application. For specific information, check the printing section in your application documentation.

For information on print media types and sizes, see chapter 2, “Print Media,” in the *Reference* guide.

### A Note for Users of Aldus Applications

If you use an Aldus application (or one that used to be owned by Aldus, such as Adobe PageMaker or MacroMedia FreeHand), when you want to print, hold down the Option key while selecting Print from the File menu. This brings up the LaserWriter windows, which contains the QMS printing options. Normally, Aldus applications bypass LaserWriter and use an Aldus printer driver, which prevents you from accessing QMS printing options.

### A Note for Users of Adobe PhotoShop

If you use Adobe PhotoShop, go to PhotoShop's Page Setup dialog box, and select Use Printer's Default Screen under the Screens option. This allows your choices in the QMS driver to take effect.

# What Next?

Now that you've connected your printer to a Macintosh and installed the printing utilities and drivers, you need to set the LocalTalk interface values via the control panel for your printing environment. Use the Administration/Communications/LocalTalk menu to set the LocalTalk interface values used for printer-host communication in your environment. See chapter 4, "Printer Configuration," in the *Reference*, for details on all the interface values. But first, skip to chapter 4, "Control Panel," to find out how to use the printer's control panel keys, indicators, and message window.

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# 4

# Connecting to a PC

## In This Chapter . . .

- Connecting via the parallel port
- Connecting via the serial port

# Introduction

This chapter explains what an interface is and describes how to connect your printer to a PC via the parallel port and/or the serial port.

## Interface

Interface is the point at which two elements connect so they can work together. Printer-computer interface is the way a printer connects to and works with a computer (a microcomputer, workstation, minicomputer, mainframe computer, or a network), and it involves both hardware and software. The way your printer interfaces with a computer depends on many things, including computer type, computer ports available, interface cabling, application software, printer emulations, and printer drivers.

## Optional Interfaces

In addition to the three standard interfaces—LocalTalk, bidirectional parallel, and serial—the QMS 1060 Print System has the option of using two optional interfaces to connect your printer to an Ethernet or Token-Ring network.

If you've purchased an optional interface for your printer, see chapter 6, "Printer Options" of the *Reference* guide as well as the documentation that comes with the interface for installation instructions.

# Before Making the Connection

If you have new PC and it has not been connected yet, before connecting the printer to the PC, you should follow the manufacturer's instructions for setting up the PC and installing (if necessary) any operating system software, such as DOS and and/or Windows.

## What You Need

Interface cables are not included with your printer. If you're replacing a printer, you may already have the necessary cables. If not, you'll need to purchase the cables from your QMS vendor or a local computer store.

To connect your printer to a single PC, you need **one** of the following:

- A parallel cable with a 36-pin male and a 25-pin male connector

  **or**

- A serial cable with either a 9-pin female and a 9- or 25-pin connector (depending on your computer's serial port) and a null modem adapter.

» **Note:** *See the "Cable Pinouts" section of appendix B, in the Reference guide for cable pinout information.*

### How to Choose a Cable

**Parallel cable**—If a parallel port is available on your computer, we recommend using a parallel cable. Your printer supports both Centronics parallel and IEEE 1284 bidirectional parallel communication. The type of parallel cable you use depends on the type of parallel communication your computer supports (check your computer user's guide if you're unsure).

- If your computer supports only IEEE 1284 bidirectional parallel communication, you need an IEEE 1284 bidirectional parallel cable (IEEE 1284 is indicated on cable) . This cable must be 6.5 feet/2 meters or less in length.
- If your computer supports only Centronics parallel unidirectional communication, you may use either a Centronics parallel cable (marked on cable) or an IEEE 1284 bidirectional parallel cable (IEEE 1284 is indicated on the cable). However, we recommend an IEEE 1284 cable. It must be 6.5 feet/2 meters or less in length while the Centronics cable may be longer.

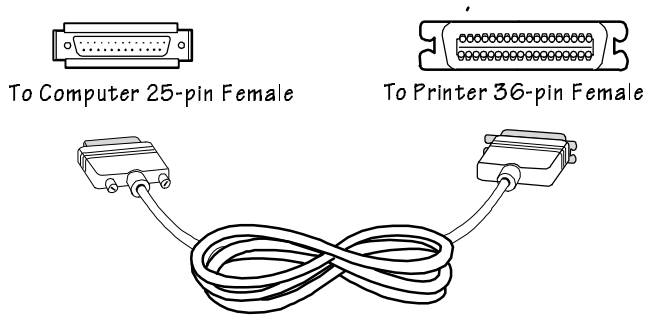
**Serial cable**—If the printer is more than 6.5 feet/2 meters from the computer, we recommend using a serial cable for better communication. For best results, the printer and computer should be less than 25 feet/7.6 meters from each other.

# Making the Connection

▲ **Caution***: If you're connecting the printer to a single PC, turn off both systems first.*

**1 Connect the PC and the printer**

- Parallel cable
  - a Connect the 25-pin end of the cable to the PC's parallel port.
  - b Tighten the screws.
  - c Attach the 36-pin end of the cable to the printer's parallel port (it's labeled "PARALLEL").
  - d Close the clips.

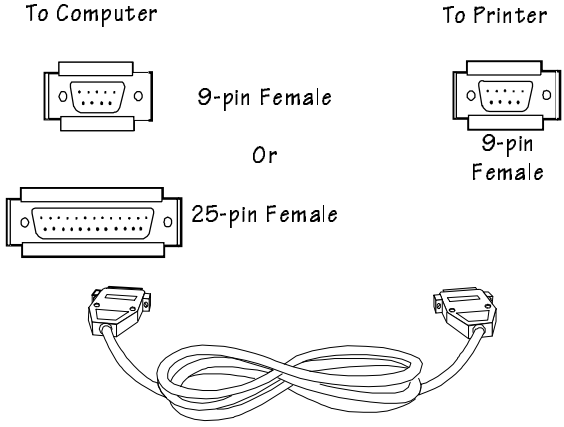


- Serial cable

  a Connect the serial cable (with the null modem adapter attached) to the PC's 9- or 25-pin male serial port.

  b Connect the other end of the cable to the printer's serial port (labeled "SERIAL").

  c Tighten the screws.




**2 Turn on both the printer and the PC.**

**3 Test communication between the printer and the PC.**

You can do this by sending a file from one of your applications, or you can see the following section, "Testing Communication."

# Testing Communication

To test communication between your printer and your PC, first create a short file that ejects a page from the printer. Then send the file to the printer.

## Creating the Test File

To create the test file, type the following commands at the DOS prompt:

```
copy con printest.ps↵
showpage↵
^D^Z↵
```

(All commands above except the DOS **copy** command are case sensitive and must be typed exactly as shown.) Showpage is a PostScript command that prints a blank page. The ↵ symbol means to press the Enter key. To produce the ^D and ^Z, press and hold down the Ctrl key while you type the appropriate letters (d and z). These characters signify the end of the file and must always be included.

## Sending the Test File

### Parallel Communication

1 **To send the PRINTEST.PS file you just created to the printer, type**

```
print printest.ps↵
```

2 **If you're prompted for the name of the list device, type**

```
lpt1↵
```

or type the name of the PC's parallel port to which the printer is connected (for example, `lpt2` or `lpt3`).

» **Note:** *If the computer has more than one parallel port, they're probably labeled. If not, check the computer documentation for the LPT port names.*

3 **If the printer and PC are communicating, a blank page ejects from the printer. Skip ahead to "PC Printing Software" to finish connecting the printer.**

If a blank page doesn't eject and you typed the file correctly, you may want to check your AUTOEXEC.BAT file to see if LPT1 (the parallel port) is being directed to COM1 (the serial port):

a If the AUTOEXEC.BAT file contains the line

```
MODE LPT1:=COM1:
```

delete it.

b Then type

```
MODE LPT1:,,P↵
```

The “P” represents infinite retry and it tells the PC to send print jobs until the printer accepts them.

c Restart the PC and retry the communication test.

See chapter 6, “Troubleshooting,” of the *Operation* guide and refer to your DOS documentation for more information.

## Serial Communication

**1 To send the PRINTEST.PS file you just created to the printer, type**

```
print printest.ps↵
```

**2 If you’re prompted for the name of the list device, type**

```
com1↵
```

or type the name of the PC’s serial port to which the printer is connected (for example, `com2` or `com3`).

» **Note:** *If the PC has more than one serial port, they're probably labeled. If not, check the PC documentation for the COM port names.*

**3 If the printer and PC are communicating, a blank page ejects from the printer. Skip ahead to “PC Printing Software” to finish connecting the printer.**

If a blank page doesn’t eject and you typed the file correctly, you may want to check your AUTOEXEC.BAT file in DOS to make sure that the printer's serial port settings match those of the PC.

a Look for a command line like this in your AUTOEXEC.BAT file:

```
MODE COM1:9600,N,8,1,P↵
```

In this example, the serial port settings are 9600 for baud rate, N (no) parity, 8 data bits, and 1 stop bit. The “P” stands for infinite retry.

» **Note:** *If the **mode** statement isn’t in your AUTOEXEC.BAT file, you may temporarily set these parameters at the DOS prompt to continue this test by typing the **mode** statement as shown above. To make this setting permanent, you’ll need to add this statement to your AUTOEXEC.BAT file.*

b Restart the PC, and then check the start-up page, which prints when you turn on the printer (unless you disabled it). This tells you the current serial port settings for the printer.

c If the serial settings (baud rate, parity, data bits, and stop bits) shown on the start-up page match those in your AUTOEXEC.BAT file, you need make no further changes. Go to the section “Special PC Concerns” later in this chapter.

If the printer’s serial port settings are different from your PC’s settings, use the printer control panel, as described in the following section, “Changing Serial Port Settings,” to make them match.

## Changing Serial Settings

Since your printer is configured at the factory for the most typical printing environments, the serial settings in your AUTOEXEC.BAT file and on the start-up page should be the same. However, if they differ, you must configure the printer to use the serial settings specified in the AUTOEXEC.BAT file.

Press the following control panel keys in the order shown:

| **Press this key...** | to... | For 1.5 seconds, the message window reads ... | and then it reads ... |
|---|---|---|---|
| **Online/ Offline** | Turn off the Ready indicator and enable printer configuration. | | IDLE |
| **Menu** | Access the configuration menu. | CONFIGURATION | OPERATOR CONTROL |
| **Next** | Advance to the Administration menu. | | ADMINISTRATION |
| **Select** | Access the Administration menu. | | COMMUNICATIONS |
| **Select** | Access the Communications menu. | | TIMEOUTS |
| **Next** | Advance to the Serial menu. | | SERIAL |
| **Select** | Access the Serial menu. | | MODE |
| **Next (one or more times)** | Access the Baud Rate menu. | | BAUD RATE |
| **Select** | Access the Baud Rate menu. | | *9600 |

| | | | |
|---|---|---|---|
| **Next (one or more times)** | Advance to the correct baud rate. | | # |
| **Select** | Select the displayed baud rate. | | # IS SELECTED BAUD RATE |

**If you need to change other settings, press the Next key to access the appropriate menu option, then return to the point where you press the Select key to access the Administration menu and select the new settings.**

| | | | |
|---|---|---|---|
| **Online/ Offline** | Access the Save Changes option. | | SAVE CHANGES? *NO |
| **Next** | Advance to the Yes option. | | YES |
| **Select** | Save changes. | | IDLE |
| **Online/ Offline** | Put the printer back on line (the Ready indicator lights). | | IDLE |

» **Note:** *Shaded table cells indicate that the message scrolls.*

## Verifying the Serial Setting Changes

1 **Turn the printer on and off again.**

2 **Compare the serial port settings listed on the start-up page to those in your AUTOEXEC.BAT file.**

3 **Try the communication test again.**

If a blank page ejects from the printer, the printer and the PC are communicating. Skip ahead to “PC Printing Software,” below, to finish connecting the printer. If a blank page does not eject and you typed the file correctly, see chapter 9, “Troubleshooting,” of the *Operation* guide, and refer to your DOS documentation for more information.

# PC Printing Software

If you're replacing a PostScript printer, you can probably start printing now with the printing software already in place. Refer to your application documentation for instructions on sending documents to the printer.

**However,** if you want to be able to use all your printer's special features (like collation, 600x600 dpi printing, and gamma correction), **or** if you've never printed to a PostScript printer before, we recommend you take a few minutes to make sure you have the following printing software installed:

- PS Executive Series Utilities
- A PostScript printer driver
- Printer description files (if you use QuarkXPress 3.3, Aldus PageMaker, or Adobe PhotoShop)

## Installing PS Executive Series Printer Utility Software

PS Exec, included on the DOS format disks we shipped with your printer, is a utilities program for controlling the printer from the PC. For example, through PS Exec you can turn off the start-up page, rename the printer, download fonts, print font samples, and manage hard disks. Many of the procedures described in this manual involve using PS Exec. The README file on the PS Executive disk explains how to install the program, and the on-line help explains how to use it.

## Installing a PostScript Printer Driver

**If you're using Windows,** we recommend that you install the QMS-developed Windows driver, which is on the disk called Windows Drivers (shipped with the printer). Instructions for installing and activating the driver are in the next section.

**If you're using a non-Windows application,** read the printing section of the application documentation for information on choosing a PostScript driver. If the application does not provide a PostScript driver, contact the application manufacturer to see if one has become available since you bought the program. Also, PostScript drivers for some applications are available through the QMS bulletin board and through CompuServe; see appendix A, “QMS Customer Support,” for information.

Also, check to see if application notes (tips for printing from specific applications) are available for your application from Q-FAX, the QMS bulletin board, or CompuServe. Appendix A, “QMS Customer Support,” explains how to use these QMS information services.

## Installing the QMS Windows Driver

The QMS-developed Windows driver supports all the printer's features. Use the following procedure to install the driver:

1 **With Windows running on your PC, insert the QMS “Windows Driver” disk (shipped with your printer) in the PC’s 3.5" disk drive.**

2 **Open the Windows Control Panel, and double-click the Printer’s icon.**

The Control Panel icon is usually located in the Program Manager’s Main window.

3 **In the Printers dialog box, choose the Add button.**

4 **From the List of Printers that appears, choose Install Unlisted or Updated Printer, and then choose the Install button.**

5 **In the text box that appears, type the name of the disk drive (for example, a:\) the Windows Driver disk is in, and then choose OK.**

6 **In the Add Unlisted or Updated Printer dialog box, select the appropriate printer:**

- If you're using the QMS Level 2 Windows printer driver, select your printer (for example, QMS 1060 Level 2) from the list of printers, and choose OK.
- Otherwise, select QMS PostScript Printer, and choose OK.

» **Note:** *If you see the message* `Insert Microsoft Windows 3.1 Disk #5 or a disk with the updated SSERIFF.FON file in...,` *choose Cancel.*

7 **When QMS 1060 Level 2 appears in the list of printers, choose the Connect button to configure the printer port.**

8 **In the Connect dialog box, select the appropriate computer port in the Ports list, and then choose OK.**

9 **Choose the Setup button to configure the printer's default settings:**

- If you're using the QMS Level 2 Windows printer driver, on the setup tabs select the appropriate default settings.
- Otherwise, in the PostScript Printer on xxx dialog box, select your printer (for example, QMS 1060) in the Printer drop-down list box, and select the appropriate default settings.

10 **Choose OK to return to the Printers dialog box.**

11 **Choose Set As Default Printer to make the QMS printer the default printer.**

12 **Repeat steps 3-10 to install the QMS driver for other ports, or choose Close to exit from the Printers dialog box.**

Now you can set printer options from your application by choosing Print Setup from the application's File menu and then choosing the Options button. Choose the Help button in any of the driver dialog boxes for information on driver options.

## Printer Description Files

Printer description files for Windows applications are included on the QMS-developed Windows Drivers disk shipped with your printer.

If you use the QuarkXPress 3.3, after you install the QMS driver for Windows, install the QMS 1060 PDF according to the instructions in your QuarkXPress documentation for installing PDFs.

If you use PageMaker 5.*x*, use the version 4 PPD on our Windows Drivers disk. If you experience problems using our Windows driver with this application, refer to chapter 6, the “QMS Windows Driver Printing Problems,” section, in the *Operation* guide for more information.

If you use Adobe Photoshop, for best output quality use the QMS-developed Windows driver. Then, so that choices in the QMS driver take effect, go to PhotoShop’s Page Setup dialog box, and select Use Printer’s Default Screen under the Screens option.

# Printing from the PC

You're now ready to print from your PC. From this point, you'll probably perform most printing tasks from your application. For specific information, check the printing section in your application documentation.

For information on print media types and sizes, see chapter 2, “Print Media,” in the *Reference* guide.

# What's Next?

Now that you've connected your printer to a PC, go to the next chapter, to learn about the printer's control panel keys, indicators, and message window.

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# 5

# Control Panel

## In This Chapter . . .

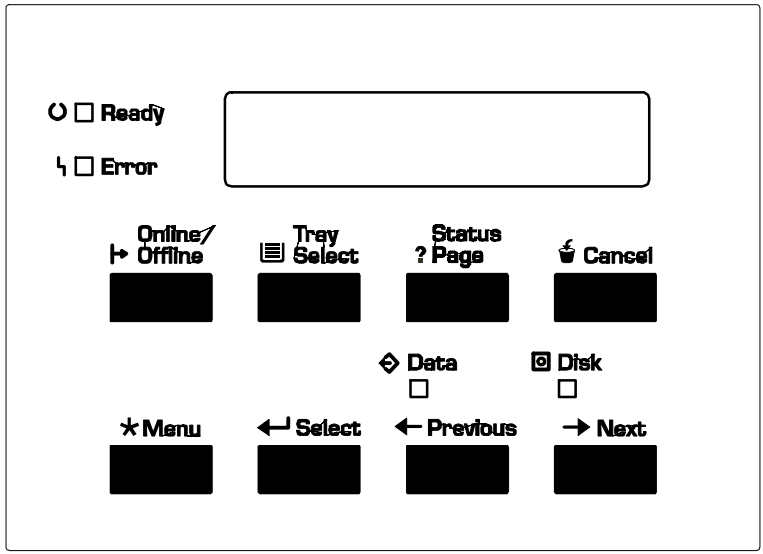
- Control panel indicators
- Control panel message window
- Control panel keys

# Introduction

The control panel, located on the front of the printer, allows you to direct the printer's operation. In addition, it displays the current status of the printer, including any condition that needs your attention.

The control panel consists of the following parts:

- Four indicators to provide printer status information.
- A message window to display status and configuration information.
- Eight keys to allow you to control the printer.



# Control Panel Indicators

Four indicators on the control panel display printer status information.

| | |
|---|---|
| | The Ready light is<br>■ on when the system is on line and ready.<br>■ blinking when the printer is warming up.<br>■ off when the system is off line or not ready or both. |
| | The Error light is on when the printer requires operator intervention. This indicator is usually accompanied by a status message in the message window. |
| | The Data light is on when the printer is receiving data from one or more of the simultaneous interfaces. |
| | The Disk light is on when any optional printer hard disk is being accessed. |

# Message Window

The control panel message window provides status and configuration information. Status messages are listed in chapter 6, “Troubleshooting,” of the *Operation* guide. Printer configuration is explained in chapter 4, “Printer Configuration,” of the *Reference* guide.

Messages are displayed in several different fashions in the 1060 Print System message window.

- **Continuous display** — A short status message such as `IDLE` displays continuously until the status changes.
- **Scrolling display** — A longer status message, such as `WAITING ON INPUT END JOB?`, scrolls marquee-style so that you can read the whole message whenever you happen to look at the printer. Throughout this manual, messages that scroll are shown in shaded boxes.
- **Changing display** — Messages that show you where you are in the configuration menu display in two parts. For 1.5 seconds, the name of the menu you are leaving displays in the window; then the menu or option you have reached displays until you press another key.

  When you go automatically through one level to its options, the level you pass through displays for 1.5 seconds, and then the first option displays. For example, when you take the printer off line and then press the Menu key, the message window reads `CONFIGURATION` for 1.5 seconds and then switches to `OPERATOR CONTROL.`

## Setting the Message Window Language

Status messages and configuration menus can be displayed in the message window in English, French, German, or Spanish. If you need to change the message window language, use the Administration/Miscellaneous/Keypad Language menu.

If you're not familiar with using the configuration menu, refer to chapter 4, "Printer Configuration," of the *Reference* guide for complete information.

| | |
|---|---|
| **Menu** | Administration/Miscellaneous/Keypad Language |
| **Choices** | English, French, German, Spanish |
| **Default** | English |
| **Notes** | The printer must be restarted for changes to this menu to take effect. |

# Control Panel Keys

## Online/Offline, Tray Select, Status Page, and Cancel Keys

The Online/Offline, Tray Select, Status Page, and Cancel keys access frequently used printer options.

| | |
|---|---|
| | The Online/Offline key switches the printer from on line to off line status. Press the key once to take the printer off line when it is on line and once to return the printer to on line when it is off line.<br><br>If a remote console has taken the printer off line, pressing the Online/Offline key on the control panel will not take effect until the console puts the printer back on line.<br><br>You must take the printer off line before using all other keys except the Status Page and Cancel keys. |
| | The Tray Select key allows you to select the active media input source:<br><br>■ multipurpose (multipurpose tray)<br>■ lower (standard cassette)<br>■ optional (optional cassette)<br><br>The printer must be off line for you to use the Tray Select key. |

| | |
|---|---|
| | Use the Status Page key to print a listing of the current printer settings. See the “Special Pages” section of chapter 4, “Printer Configuration,” in the *Reference* guide for information on the status page contents. You can print a status page whether the printer is on line or off line. |
| | Press the Cancel key and select the Yes option to cancel all print jobs with a printing, interpreting, terminating, or spooled status, or select the End Job option to send an end-of-job indicator to jobs waiting for incoming data. After all jobs with the above status are canceled or after the current job is ended, dependent on your selection, the printer resumes printing other jobs that are in the queue. (See chapter 3, “Advanced Printing Features,” of the *Operation* guide for complete information.) You can use this key while the printer is on line.<br><br>If you press the Cancel key by mistake, or if you decide not to cancel a print job after pressing this key, press the Menu key to “cancel” the Cancel key’s function. |

## Menu, Select, Previous, and Next Keys

The Menu, Select, Previous, and Next keys are used in printer configuration (explained in detail in chapter 4, “Printer Configuration,” of the *Reference* guide). Before using any of these keys, press the Online/Offline key to take the printer off line.

| | |
|---|---|
| | The Menu key gives you access to the configuration menu. First press the Online/ Offline key to take the printer off line, and then press the Menu key to access the configuration menu. When you're changing the printer configuration, press this key to cancel a change (before pressing the Select keys), to return to a previous menu, or to return to a previous character when entering character information. |
| | Press the Select key to access a menu or to choose a displayed menu option. |
| | Press the Previous key to return to the previous selection or option for the current menu. When changing character information, use this key to return to the previous choice for the current input character. |
| | Press the Next key to advance to the next selection or option in the current menu. When changing character information, use this key to advance to the next choice for the current input character. |

# What's Next?

Now you're ready to print. For more information on the day-to-day operation of your printer, refer to the *Operation* guide. For more technical information, refer to the *Reference* guide.

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# A

# QMS Customer Support

## In This Chapter . . .

- Sources of customer support
- QMS world-wide offices

# Sources of Support

Several sources of help and information are available, depending on the type of help you need:

## Your QMS Vendor

Your local vendor (the one from whom you bought the printer) may be best equipped to help you. Your vendor has specially trained service technicians available to answer questions, and the equipment to analyze your printer problems.

## Your Application Vendor

Often, “printing” problems have more to do with the application being used than with the printer. In this case, the application manufacturer is the best source of help.

## Q-FAX

Q-FAX, a QMS information retrieval service, provides application notes, technical support notes on common printing problems, and information about printer specifications, options, accessories, consumables, and prices.

In the United States and Canada, call (800) 633-7213 to reach Q-FAX. In all other countries, call (334) 633-3850. Have your fax number handy when you call (or place the call from your fax machine's handset).

You can choose to have either a directory (a list of currently available documents on a particular topic) or a specific document sent to you. The first time you call, request the directory (press 2 on your phone or fax keypad when prompted). Then call back to request specific documents. You can order up to three documents per call.

## The QMS Corporate Bulletin Board System

The QMS Corporate Bulletin Board System (BBS) contains technical support notes, application notes, drivers, patches, and utilities, and you may leave technical questions not requiring an immediate response on electronic mail for the Sysop (System Operator).

The bulletin board [(334) 633-3632] operates at 1200, 2400, 9600, and 14400 baud, 8 data bits, no parity, 1 stop bit, with XMODEM, YMODEM, and ZMODEM capabilities. Contact the QMS Customer Response Center for more information about the bulletin board.

## CompuServe

Through CompuServe, you ask general (non-technical) questions, share information with other users, and access printing information and programs. When you use CompuServe type `go qmsprint↵` to go directly to the forum where QMS is located.

The QMS library section contains application notes, printer drivers, utilities, technical information, and announcement files.

## Internet

The QMS server provides access to technical reports, new product announcements, a trade show schedule, and other general information about QMS.

You can access the QMS server via any one of the many web viewers available to Internet users. If you don't have access to a web viewer, we recommend the NCSA Mosaic web viewer (Mosaic is at ftp.ncsa.uiuc.edu). The QMS home page is at http://www.qms.com/. The QMS ftp resource is ftp.qms.com.

## QMS Customer Response Center (CRC)

The QMS Customer Response Center is available from 7 a.m. to 6 p.m., Central Standard Time, at (334) 633-4500 (US). You can also fax questions to the CRC at (334) 633-3716 (US). Please indicate whether you would like a faxed or a phoned reply.

If you call for assistance, have the following information ready so our technicians can help you more quickly:

- Your phone number, fax number, and shipping address
- A description of the problem
- The printer model and serial number
- The type of host computer you are using
- The type and version of operating system you are using
- The interface you are using, and, if serial, the protocol
- The application and version you are using
- The emulation you are using
- Your printer firmware version (listed on the status and start-up pages)

## QMS National Service

If you have a problem you cannot resolve, contact QMS National Service. You may need to contact QMS National Service for the following type of message (where # is the error number):

```
CALL FOR SERVICE ENGINE ERROR #
```

### Phone Numbers

| | |
|---|---|
| **(800) 762-8894** | Service information and maintenance pricing for QMS and other manufacturers printer's |
| **(800) 858-1597** | On-site service and depot repair information<br>7 a.m. to 7 p.m. Central Time |
| **(334) 633-4300** | Spare parts ordering and information |
| **Extension 2530** | 8 a.m. to 5 p.m. Central Time |

» **Note:** *The above numbers are valid in the United States. To contact QMS in other countries, see the "QMS World-wide Offices" section later in this appendix.*

# QMS World-wide Offices

| | |
|---|---|
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# B

# Configuration Menu

## In This Chapter . . .

- Configuration menu charts

# Introduction

This section provides the following menu charts:

- Configuration Menu

  Provides a menu chart of the main Configuration menu selections

- Communications Menu

  Provides a menu chart of the Communications menu.

- Emulations Menu

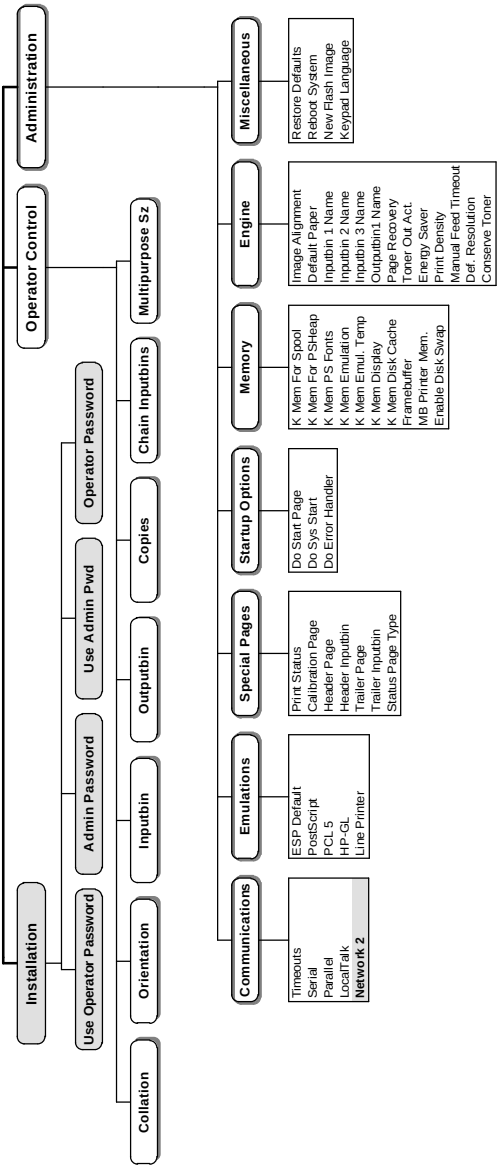
  Provides a menu chart of the Emulations menu.

## Menu Chart Conventions

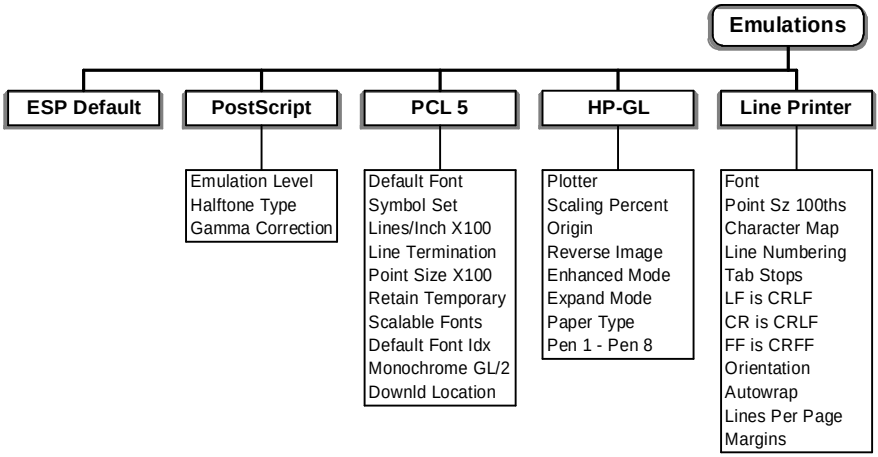
The following conventions are used in the menu charts:

- Some menu selections are highlighted in gray. These selections will only appear on your print system if the specified option is installed.
- These menu charts show only the top-level menus. See chapter 4, “Printer Configuration,” of the *Reference* guide for detailed information on a menu selection’s options.
- The Administration/Communications menu and the Administration/Emulations menu both have more menu selections than it is possible to fit on one page, so each of these menus have their own individual menu charts.

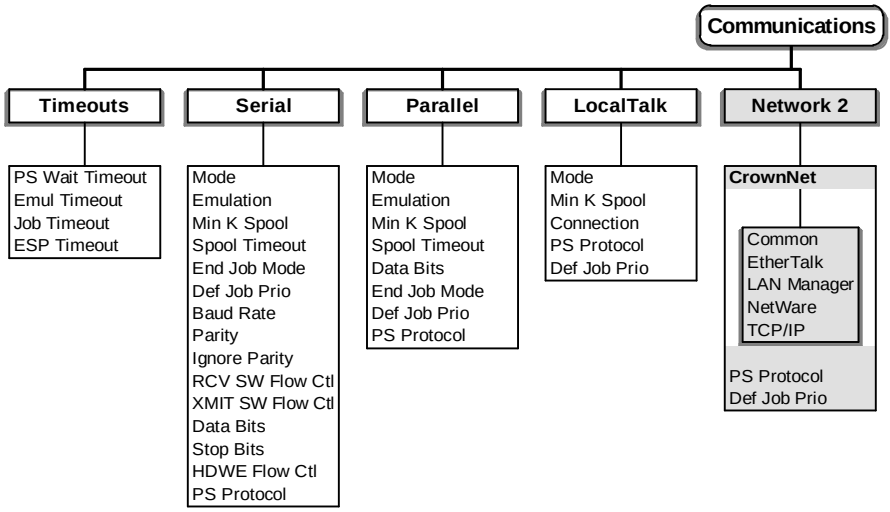
# Configuration Menu



# Administration/Emulations Menu



# Administration/Communications Menu

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